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#### CENTRAL INTELLIGENCE AGENCY

# INFORMATION REPORT

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COUNTRY	East Germany	REPORT		
SUBJECT'	Production of HV Elektromaschinenbau of	DATE DISTR.	23 December 1954	
	the Ministry of Machine Construction	NO. OF PAGES	4	
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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.

THE APPRAISAL OF CONTENT IS TENTATIVE.

(FOR KEY SEE REVERSE)

1. General Production under the Main Administration for Electric Machinery

Total production of the HV-Elektromaschinenbau for 1953 amounted to 300,000,000 DME. Owing to the shortage of materials and to the events of 17 June 1953, the plan quota for the first half of 1953 could not be fulfilled. Consequently the newplan was adjusted to agree with actual figures. According to conservative estimates, the half-year plan was fulfilled orly 30 to 40 percent. The full-year plan for 1953 was only 85 percent fulfilled, and part of that was in semifinished goods. For example, the Karl Liebknecht Transformer Works produced semifinished goods to the value of 10 - 12,000,000 DME.

- 2. A large proportion of product-quotas was fulfilled 95 percent; even here material bottle-necks prevented complete fulfillment. Reparations and the whole export program to the Soviet Union had to be fulfilled as a priority matter. It was impossible to satisfy the demands of the Soviet Union to the letter, even though the USSR supplied bottle-neck materials earmarked for its own orders.
- 3. 1954 Production Plan

Total production of power machinery for 1954 is expected to amount to 450,000,000 DME. This increase is largely accounted for by an increase of production in Sachsenwerk Niedersedlitz, which has a capacity of 140,000,000 DME. Before 31 December 1953, this firm was among the last 33 SAG firms. The 1954 Plan is not expected to be fulfilled, because the Materials Plan will not be aligned with the Production Plan.

4. Five Year Plan

After careful estimates made by the Supply Departments of the Main Administrations of the Ministry, it is being said that 75 percent will represent the final figures for the fulfillment of the Five Year Plan. One of the key points in the Five Year Plan is power production and the supply of power to installations.

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### 5. Bottlenecks in Production

The principal bottlenecks and difficulties encountered in the electrical machinery in East Germany are:

#### a. Transformer Oil

For the first time in the Plan Year 1954, it was determined that faulty planning for the supply of transformers and commutators (Transformatoren und Kraftschalter) caused a shortage of 2,500 tons of transformer oil with minus 40 freezing-point. Production at Luetzkendorf is far from sufficient to cover this shortage, even if the entire production of transmission lubricant were stopped in favor of transformer oil. The Soviet Union refused any assistance. A little additional oil was obtained and applied to Soviet orders. Through DIA Chemie, negotiations were instituted with West Berlin agents; these resulted in the delivery of 250 harrals of transformer oil from Oberursel in the Taunus to the Transformatoren u. Roentgen work in Dresden. The delivery was made by truck. Negotiations with the Shell Oil Company in Hamburg for the delivery of the total quantity still lacking were abortive.

#### b. Sheet Metal for Transformers and Dynamos

The rolling-mills in Burg near Magdeburg, Oberhau in the Erzgebirge, and Eisenhuettenwerk Thale are not in a position to deliver the necessary transformer and dynamo sheet metal in the needed quantities and qualities. A metal sheet of 0.9 to 1.3 Watt per kilogram of iron is required. Otherwise the enterprises are not in a position to maintain the idling losses of the large transformers according to standards set up by the VDE (Verband Deutscher Elektrotechniker): 6,000 to 7,000 tons of transformer sheet metal are required per year.

The annual requirement for dynamo sheet metal amounts to between 10,000 and 12,000 tons. Here, it is true, the demands are not so exigent since a watt-loss up to 2.7 watts is allowed for each kilogram of iron. According to recent information, a new method of producing transformer sheet is being used in the USA. A special annealing and rolling process produces sheet with only 0.5 watt loss per kilogram of iron. Measures are being taken in the Central Department for Material Procurement of the Ministry of Machine Construction to secure similar sheet. Especially in the construction of transformers up to a capacity of 100 MVA, it is vitally necessary to procure a sheet with low watt-loss, since these machines show an enormous loss, if one may judge by those produced in the DDR. The large transformers of 100 MVA capacity delivered in 1952 and 1953 to the Soviet Union, to Poland, and to DDR consumers shown an efficientcy (Effektiv-Leistung) of only 95 percent.

#### c. Transformer Construction

In the construction of current transformers and other types, the bad quality of the DDR product has unfortunate consequences. The cores must be made of Mu-metal with 75 percent nickel content. But because of the tight situation with regard to sheet metal, it is difficult to obtain even the minimum essential proportion of this metal for cores.

### d. Mica Products

The entire mica products industry lives from hand to mouth insofar as it cannot make out with mica powder. For the production of mica products for the Soviet Union, the latter had to deliver mica by airplane.

# e. Boiler Plate

Boiler plate is in short supply in 8 to 22 millimeter sizes for the construction of air compressor systems, and understructure for power commutators and electric locomotives.

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# f. Deep-drawn Sheet Metal

Shortages exist in deep-drawn sheet metal used in radiators for cooling transformers. The only firm in the DDR in a position to make these products is the private firm of Arthur Schlenker, in Chemnitz. This firm processes 1,000 tons per year. This amount has to be procured by import, since the Hettstedt Rolling Mills cannot produce sheets in the necessary 270 millimeter width. Since Eisenhuettenwerk Thale will not roll the basic metal bars (Ausgangsplatinen), these bars will again, as before, have to be rolled in sizes of 750 - 1500 mm. and 1000 - 2000 mm, entailing an enormous loss in cutting. In 1953, not 300 tons of deep-drawn sheet metal could be produced.

### g. Other Products in Short Supply

Shortages exist in the following products:

Boiler pipe
Seamless pipe of all sizes
Copper pipe
Brass pipe
All kinds of structural iron and steel, especially double-T and angleiron for transformer girders, structural steel for construction of transmission
boxes (Schaltgerueste).
All kinds of automatic steel (9 S 20 K) (Automatenstaehle)
Flachprofile especially Alu-Profile for bus bars (Sammelschienen) for
large-scale relay equipment (Grossverteileranlagen)
Drum-springs and Remanit-springs for the manufacture of Espansinscommutators in the Muskau/Oberlausitz Commutator Works.

### h. Cast Steel, Cast Iron, Malleable Iron

An acute shortage exists in the production of cast steel, cast iron, and malleable iron. Not infrequently in the Plan Year 1953, the East German foundries were shut down two or three days a week, owing to insufficient deliveries of coke from Czechoslovakia and Poland, and pig iron and ore from the Soviet Union. Hematite was especially short. Today, most of the foundries of the DDR use up to 85 percent scrap and only 14 percent pig iron.

### i. Material Deliveries from Soviet Union and Soviet Orbit Countries

Heretofore, most of the material shortages on products destined for the Soviet Union as exports or reparations were made up by deliveries from the USSR or Soviet Orbit countries. At present, however, the Soviet Union is delivering materials to East Germanyonly in return for East German exports.

#### 6. Problems of Planning

The mass competitions instituted in the enterprises as a result of the raising of norms are principally due to worry over material supply. Not infrequently the workers will be partially employed in the first half of the Plan Year, only to be forced to work later hours and under all possible pressures in the last quarter of the year in order to fulfill the Plan.

Planning for the labor force and fulfillment of the Labor Flan is supervised by the Labor Department of the HV. The Labor Force Plan, where it could not be carried out, was modified so that it siphoned employees out of similar industries into the enterprises whose Labor Plan could not be fulfilled. A special shortage exists among engineer personnel. The shortage is especially acute when the Cadre Department applies too strict standards of political conduct and belief, past and present.

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c. A firm under the name of <u>VEB Elektromedizin</u> , located at Hohenneuendorf near Berlin should be added to the previous list.							
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